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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,013	09/30/2005	Andreas Renz	13478-00002-US	6294
23416 7590 08/13/2008 CONNOLLY BOVE LODGE & HUTZ, LLP P O BOX 2207 WILMINGTON, DE 19899			EXAMINER MCILWAIN, ELIZABETH F	
			ART UNIT 1638	PAPER NUMBER
			MAIL DATE 08/13/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,013

Applicant(s)

RENZ ET AL.

Examiner

Elizabeth F. McElwain

Art Unit

1638

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 15-25 and 27-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-10, 16, 24, 25, 29 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 15, 17-23, 27, 28, 31 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed April 22, 2008 has been entered.

Claims 11, 15, 17-23, 27 and 28 are currently amended.

Claims 1-10, 16, 24, 25, 29 and 30 are withdrawn.

Claims 12-14 and 26 are cancelled.

Claims 31 and 32 are newly submitted.

Claims 1-11, 15-25, 27-32 are pending.

Claims 11, 15, 17-23, 27, 28, 31 and 32 are examined on the merits.

Election/Restrictions

1. This application contains claims 1-10, 16, 24, 25, 29 and 30 are drawn to an invention nonelected with traverse in the reply filed on November 5, 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112.

1. The rejection of claims 18 and 19 under 35 U.S.C. 112, second paragraph, is withdrawn in view of the amendment of the claims.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 11, 15, 17-23, 27, 28, 31 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, for the reasons set forth in the last office action.
4. Applicants' arguments filed April 22, 2008 have been fully considered but they are not persuasive. Applicants argue that the amendment of the claims should overcome the rejection, stating that the structure of 80% identity to SEQ ID NO: 16 or 17 and the functional activity of LPAAT is sufficient to satisfy the written description requirement. Applicants further state that the specification provides a second LPAAT coding sequence from *M. alpina* that is 100% identical to SEQ ID NO: 16 in the overlapping region, and LPAAT coding sequences from other species are also disclosed. Applicants argue that the two sequences from *M. alpine* constitute a representative number of species within the claimed genus. Also, applicant requests separate consideration of new claims 31 and 32 drawn to sequences that are 95% identical to SEQ ID NO: 16 or encodes a polypeptide 95% identical to SEQ ID NO: 17.
5. The Examiner maintains that applicants have not shown that the sequences set forth in the specification support that genus of 80% identity to SEQ ID NO: 16 or 17. Applicants have stated in their arguments that there is 100% identity in an overlapping region, but they do not point to said region or provide the sequence identity of the entire sequence. The Examiner maintains that the specification does not describe sequences that support the genus that is claimed, including that of 95% identity to SEQ ID NO: 16 or to sequences encoding polypeptides that are 95%

identical to SEQ ID NO: 17. The specification does not point to particular structural features that confer the claimed functional activity.

6. Claims 11, 15, 17-23, 27, 28, 31 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention for the reasons set forth in the last office action.

7. Applicants' arguments filed April 22, 2008 have been fully considered but they are not persuasive. Applicants argue that Example 16 at pages 96-98 of the specification discloses a *Mortierella* LPAAT transformed into yeast and that the coding sequence used in the example corresponds to SEQ ID NO: 16. Applicants further state that one could align various LPAAT sequences to identify conserved residues and motifs that are required for activity, and the specification teaches how to determine enzymatic activity, transform plants and analyze transgenic plants, wherein this would be considered routine screening.

8. The Examiner maintains that the specification does not disclose that SEQ ID NO: 16 is the sequence that is used to transform yeast in Example 16. Applicants have not pointed to where in the specification SEQ ID NO: 16 is identified by the name MaLPAAT, and the Examiner cannot find this association in the specification. In addition, the specification does not disclose the conserved residues and motifs that are required to identify an LPAAT sequence, and therefore, one skilled in the art would not be able to determine which portions of the sequence may be modified while still retaining LPAAT activity. Furthermore, the specification does not

disclose any LPAAT coding sequences transformed into a plant and analysis of said plants. The Examiner maintains that it would require undue experimentation by one skilled in the art to practice the claimed invention, as set forth in the last office action.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth F. McElwain whose telephone number is (571) 272-0802. The examiner can normally be reached on increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EFM

/Elizabeth F. McElwain/

Primary Examiner, Art Unit 1638